FORM PTO-1595

(Rev. 6/93)

U.S. DEPARTMENT OF COMMERCE
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## RECORDATION FORM COVER SHEET PATENTS ONLY

Attorney's Docket No. 032840-003

Tradenial Commissioner of Patents and Tradenials.	Please record the attached original documents or copy thereof.
1. Name of conveying party(ics):  Ted JOHANSSON Arne RYDIN Christian NYSTRÖM	Name and address of receiving party(ies):     Name:TELEFONAKTIEBOLAGET LM ERICSSON     Address: _SE-126 25 STOCKHOLM     SWEDEN
Additional name(s) of conveying party(les) attached? [ ] Yes [X] No  3. Nature of conveyance:  [X] Assignment [ ] Merger [ ] Security Agreement [ ] Change of Name  Other:	Additional name(s) & address(se) attached? [ ] Yes [X] No
4. Application number(s) or patent number(s):  If this document is being filed together with a new application, the  A. Patent Application No.(s)  09/500,944  Additional numbers attact  5. Name and address of party to whom correspondence concerning document should be mailed:	e execution date of the application is:  B. Patent No.(s)  hed? [] Yes [X] No  6. Total number of applications and patents involved:
Name: Ronald L. Grudziecki Address: Durns, Doane, Swecker & Mathis, L.L.P. P.O. Box 1404 Alexandria, Virginia 22313-1404	7. Total fee (37 CFR § 3.41): \$_40.00  [X] Enclosed  [X] Authorized to be charged to deposit account, if necessary  8. Deposit account number:
	Date Total number of pages including cover sheet, attachments, and document.

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231

DOCKEY

032840-003 Attorney's Docket No.

## **ASSIGNMENT**

(JOINT)

THIS ASSIGNMENT, by Ten JOHANSSON, ARNE RYDIN, and CHRISTIAN NYSTRÖM, residing at Sylavagen 88, S-182 62 Djursholm, Sweden; Simtuna Markusdo, S 740 83, FJARDHUNDRA, SWEDEN and FLINTLASVAGEN 12, S-192 59 SOLLENTUNA, SWEDEN (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in <u>SEMICONDUCTOR DEVICE WITH DEEP SUBSTRATE CONTACTS</u> set forth in an application for Letters Patent of the United States,

- (1) U which is a provisional application
  - (a) I to be filed herewith; or
  - (b) Dearing Application No., and filed on; or
- (2) which is a non-provisional application
  - (a) In having an oath or declaration executed on even date herewith prior to filing of application;
  - (b) Dearing Application No. 09/500,994, and filed on FEBRUARY 9, 2000; or
  - (c) I to be filed; and

WHEREAS, TELEFONAKTIEROLAGET I M FRICSSON, a corporation duly organized under and pursuant to the laws of <u>Sweden</u> and having its principal place of business at <u>SE-126 25 STOCKHOLM</u>, <u>Sweden</u> (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, sesigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

Application No. <u>09/500,994</u> Attorney's Docket No. <u>032840-003</u>

AND for the same considiration, the Assign is hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assigners will, whinever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Burns, Doane, Swecker & Mathis, L.L.P. of Alexandria, Virginia to insert in the spaces provided above the filing date, application number, and attorney docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Lotters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date 2000 -01-18	Signature of Assignor	Teol Thair
Date <u> </u>	Signature of Assignor	Arne RYDIN
Date	Signature of Assignor	Chair Nystrom
Date	Signature of Assignor	